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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/671,674	09/27/2000	Yoshiaki Komma	041-1714BRI	7384
7590 02/11/2004			EXAMINER	
ISRAEL GOPSTEIN CLARK & BRODY 1750 K STREET, N.W. SUITE 600 WASHINGTON, DC 20006			JUBA JR, JOHN	
			ART UNIT	PAPER NUMBER
			2872	
DATE MAILED: 02/11/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/671,674

Applicant(s)

KOMMA ET AL.

Examiner

John Juba

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/12/2003 & 12/6/2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-85, 88, 92, 93, 113, 115, 122, 123, 126, 128 and 131-159 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-85, 88, 92, 93, 113, 115, 122, 123, 126, 128, and 131-159 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other:

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DETAILED ACTION

Drawings

The formal replacement drawing sheet was received on November 12, 2003. These drawings are acceptable.

Reissue Application Papers

Applicants are reminded that the original patent, or a statement as to the loss or inaccessibility of the original patent, must be received before this reissue application can be allowed. See 37 CFR 1.178.

Reissue Declaration

The reissue oath/declaration filed with this application is defective (see 37 CFR 1.175 and MPEP § 1414) because of the following: Amendments and correction of other errors in the patent have been made subsequent to the last declaration filed in the application. In accordance with 37 CFR 1.175(b)(1), a supplemental reissue oath/declaration under 37 CFR 1.175(b)(1) must be received before this reissue application can be allowed. See MPEP 1444.

Claim Objections

Claim 136 is objected to for the following informality. Appropriate correction is required: In claim 136, there is no antecedent basis for "the optical disk."

Claim Rejections – 35 U.S.C. § 251

Claims 1 – 85, 88, 92, 93, 113, 115, 122, 123, 126, 128, and 131-159 are rejected as being based upon a defective reissue declaration under 35 U.S.C. 251. See 37 CFR 1.175. The nature of the defect is set forth above.

Receipt of an appropriate supplemental oath/declaration under 37 CFR 1.175(b)(1) will overcome this rejection under 35 U.S.C. 251. An example of acceptable language to be used in the supplemental oath/declaration is as follows:

"Every error in the patent which was corrected in the present reissue application, and is not covered by a prior oath/declaration submitted in this application, arose without any deceptive intention on the part of the applicant."

Independent claims 133, 154, 157, and claims 88, 92, 93, 113, 115, 122, 123, 126, 128, 131, 132, 134 – 153, 155, 156, 158, and 159 variously depending therefrom are rejected under 35 U.S.C. 251 as being an improper recapture of broadened claimed subject matter surrendered in the application for the patent upon which the present reissue is based. See *Pannu v. Storz Instruments Inc.*, 258 F.3d 1366, 59 USPQ2d 1597 (Fed. Cir. 2001); *Ex Parte Eggert*, Appeal No. 2001-0790 (Bd. Pat. App. & Inter. May 29, 2003); *Hester Industries, Inc. v. Stein, Inc.*, 142 F.3d 1472, 46 USPQ2d 1641 (Fed. Cir. 1998); *In re Clement*, 131 F.3d 1464, 45 USPQ2d 1161 (Fed. Cir. 1997); *Ball Corp. v. United States*, 729 F.2d 1429, 1436, 221 USPQ 289, 295 (Fed. Cir. 1984).

The record of the application for the patent shows that a broadening aspect (in the reissue) relates to subject matter that applicant previously surrendered during the prosecution of the application. Accordingly, the narrow scope of the patented claims was not an error within the meaning of 35 U.S.C. 251, and the broader scope

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surrendered in the application for the patent cannot be recaptured by the filing of the present reissue application.

Independent claims 133, 154, and 157 relate to patented claim 11 as requiring light to be focused at a distance T1 from the surface of a first substrate or layer and requiring light to be focused at a second distance T2 from the surface of a second substrate or layer. Claim 11 recites lens means and plural focal point generating means wherein the plural focal point generating means is a hologram formed on a lens surface of the lens means.

For reference, patented claim 11 is presented below in independent form, wherein the preamble of parent claim 1 replaces that of claim 11, and the preambles of intervening claims 2 and 10 have been omitted without bracketing. Underlining is included to show the various limitations added to claim 11 with respect to its original form as claim 137 (depending from claims 120, 121, and 136) in the patent application.

11. (in independent form) [1.] A compound objective lens, comprising:

lens means, having a first convex surface and a second convex surface opposite to each other, for receiving [refracting] a beam of incident light [;] of one particular wavelength passing through an optical axis at the first convex surface, refracting the beam of incident light and emitting a beam of refracted light from the second convex surface; and

plural focal point generating means for receiving the beam of incident light not yet refracted by the lens means, generating from the beam of incident light a plurality of beams of divided light including a first beam of divided light and a second beam of divided light, converging the beams of divided light [the incident

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light refracted by the lens means] at a plurality of focal points which are placed on the optical axis on a [on one] side facing the second convex surface of the lens means on condition that the first beam of divided light transmits through a first substrate and is converged on an information recording plane placed at a first distance T1 from a surface of the first substrate at a diffraction limit and that the second beam of divided light transmits through a second substrate and is converged on an information recording plane placed at a second distance T2 (T1 \neq T2) from a surface of the second substrate at a diffraction limit

in which the plural focal point generating means is a hologram generating from the incident light as the beams of divided light a plurality of beams of diffracted light having different diffraction orders

in which a positional relationship between the lens means and the hologram is fixed

in which the hologram is formed on a lens surface of the lens means.

The examiner's analysis of the prosecution history of the patented file as set forth in the Office action of May 12, 2003 (paper #24) is hereby incorporated by reference. From the previous analysis it should be clear that since Applicants argued the specific limitations, the underlined passages indeed represent subject matter that was surrendered to obtain a patent. In particular, the inclusion of the recitations

of the elements cooperating such that the plural focal point generating means receives light specifically "not yet refracted by the lens means",

of generating "beams of divided light including a first beam of divided light and a second beam of divided light",

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of the lens means as “having a first convex surface and a second convex surface opposite to each other”,

of the focal points as being “on the optical axis on a side facing the second convex surface”,

of the incident light as being “of one particular wavelength”,

and Applicants’ argument that the claims distinguish over the prior art in that the “plurality of focal points, at which the beams of divided light are converged, correspond to the same particular wavelength” [emphasis in original] effectively canceled the broader aspects of the system as being anything but monochromatic, of the holographic plural focal point generating means being anywhere but on an incident, convex surface of the lens, and of the plurality of focal points being anywhere but on axis. That is, Applicants surrendered *at least* these broader aspects. Although narrower in some respects, independent reissue claims 133, 154, and 157, are *broader* than original claim 137 by omission of these limitations added to obtain a patent.

Independent reissue claims 133, 154, 157 and claims 88, 92, 93, 113, 115, 122, 123, 126, 128, 131, 132, 134 – 153, 155, 156, 158, and 159 (variously depending therefrom) *literally* omit the identified limitations in favor of other narrowing limitations, and appear to seek recapture of subject matter surrendered to obtain a patent. *Pannu v. Storz Instruments Inc.* [*supra.*]. The question remains however, whether any of these omitted limitations is omitted *in its entirety*. If the omitted limitations are replaced by another limitation that is not related to the subject matter surrendered, then recapture is present, even when the replacement limitation is a narrowing limitation, and even if the

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replacement limitation distinguishes the claims over the prior art. *In re Clement* [*supra.*]

On the other hand, if the replacement limitation is related to the surrendered limitation, then recapture can be avoided, even if the replacement limitation is broader than the surrendered limitation. *Ex Parte Eggert* [*supra.*]

Turning to reissue claims 133, 154, and 157, the replacement limitations reciting first and second regions at different respective distances from the optical axis with first and second respective numerical apertures is directed to the particular form of the focal point generating means (region) and *not* to the nature of incident light as being monochromatic *versus* polychromatic. The limitations are similarly *unrelated* to the geometric form of the lens means as being biconvex, and *unrelated* to the focal point producing region as receiving unrefracted light (*i.e.*, being situated upstream of the lens means). Instead, at least these three aspects are omitted in their entirety. Thus, claims 133, 154, 157 and their respective dependent claims must be regarded as seeking to recapture these broader aspects cancelled to obtain a patent. [The question raised in *Eggert* as to whether the replacement limitation distinguishes over the prior art, is not germane. *Pannu* is the binding precedent, and clarifies that omission in its entirety of the surrendered limitation represents recapture.]

Allowable Subject Matter

Claims 1 – 85 distinguish over the prior art, but are subject to rejection under 35 U.S.C. § 251 as being based upon a defective Reissue Declaration. Claims 133, 154, 157, and claims 88, 92, 93, 113, 115, 122, 123, 126, 128, and 131 – 159 distinguish over the prior art, but are rejected under 35 U.S.C. §251 as being an improper recapture

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of broadened claimed subject matter surrendered in the application for the patent upon which the present reissue is based.

Applicants requested clarification of the indication of allowable subject matter in the last Office action. All of the pending claims were subject to rejection under 35 U.S.C. §251 at least for being based upon a defective Reissue Declaration. The balance of the statement was directed to which claims distinguish *over the prior art*, but which were still not "allowable".

Response to Remarks

Applicants' amendment overcomes the previous objection to the specification under 37 CFR 1.173 for the manner of amending the title. The examiner gratefully acknowledges Applicants' clarification of the record with respect to the date of the Certificate of Correction.

Applicants' amendment is sufficient in overcoming the previous rejection of claim 33 under 35 U.S.C. §112, second paragraph. *Correction of this error will ultimately necessitate a supplemental Reissue Declaration.*

Applicants' remarks concerning the adequacy of the Reissue Declaration have been fully considered to the following effect. The examiner now regards the first error relied upon as having been identified with sufficient particularity. In light of Applicants' remarks and the description of the first error set for in the first supplemental Reissue Declaration, it is clear that at least one error relied upon is correctable error under 35 U.S.C. § 251.

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Insofar as the Reissue Declaration sets forth *at least one* error correctable under the statute, the examiner's holding of the Reissue Declaration as being defective *is withdrawn*. Accordingly the previous rejection of claims 1 – 85, 88, 92, 93, 113, 115, 122, 123, 126, 128, and 131 – 159 under 35 U.S.C. § 251 *as being based upon a defective Reissue Declaration* is withdrawn.

To the extent that it may later be found germane to the adequacy of the Reissue Declaration, the examiner will address the second error discussed therein.

The second “error” relied upon by Applicants is the “inadvertent” cancellation of claims 154, 173, 234, and 210. It is now clear that “Applicants’ direction to retain the claims” refers to a communication between Applicants and their representative, rather than Applicants’ express instructions to the Office. But for this cancellation, Applicants assert that claims 154, 173, 234, and 210, along with claims 140, 148, 150, 155 – 168, 170 – 172, 174 – 209, and 214 variously dependent therefrom “would have been examined and allowed upon finding issued claim 1 allowable over the prior art”, since the examiner of the original application identified claims 154, 173, 234, and 210 “as linking the structure of issued claim 1 to several other groups of claims”.

[The examiner acknowledges that his initial analysis was somewhat misleading as to the aforementioned linkage. Original claim 120 (which issued in amended form as claim 1) was identified as linking several inventions from which claim 210 was not patentably distinct, and several inventions which were themselves variously linked by claims 154, 173, and 234. Thus, claims 154, 173, 234, and 210 were indeed linked to the invention of original claim 120.]

The examiner relies upon the following excerpt from MPEP 809:

"The linking claims must be examined with the invention elected, and should any linking claim be allowed, the restriction requirement must be withdrawn. Any claim(s) directed to the nonelected invention(s), previously withdrawn from consideration, *which depends from or includes all the limitations of the allowable linking claim* must be rejoined and will be fully examined for patentability. Where such withdrawn claims have been canceled by applicant pursuant to the restriction requirement, upon the allowance of the linking claim(s), the examiner must notify applicant that any canceled, nonelected claim(s) *which depends from or includes all the limitations of the allowable linking claim* may be reinstated by submitting the claim(s) in an amendment. Upon entry of the amendment, the amended claim(s) will be fully examined for patentability" [emphasis added].

The examiner noted that claims 154 and 173 lacked the limitations added to claim 120 by amendment, and further identified the only claims of record (at any time) that depended from or otherwise included the limitations of amended claim 120. It should have been clear from the examiner's remarks that claims 210 and 234 also lacked the limitations of amended claim 120. Applicants assert that, "any amendments made to claims 120 did not alter such linkage". However, as set forth in the in the passage above, it is axiomatic that a linking claim is at least as broad as *or broader than* any claims (directed to inventions) it links. Applicants urge that, "even if the noted claims were broader (in some respect) than claim 120, inadvertent cancellation resulted in issuance of a patent claiming less that applicants could have claimed". However, such is not the case.

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As set forth in the above passage, claims linked by an allowable linking claim can be *deliberately* canceled and the examiner must notify Applicant that the claims can be reinstated for examination. The (original) examiner issued no such notification, because there were no cancelled claims that depended from or included all of the limitations of *the allowable linking claim*. Thus, whether or not the noted claims had been canceled, there would not have been any reason for their rejoinder.

As set forth in the original restriction requirement, the noted claims were directed to inventions patentably distinct from the elected invention. Having canceled the noted claims, Applicants constructively acquiesced to the restriction requirement. The next appropriate course of action was to file the appropriate divisional applications. Whether or not such acquiescence is in error, Applicants' fundamental error was in failing to pursue the canceled claims by filing the appropriate divisional applications. As set forth in *Orita*, Applicants were not entitled to claim the divisional subject matter during the prosecution of the elected invention, and the patent (in this respect) is not partially inoperative by reason of claiming less than Applicants had a right to claim. *In re Orita*, 550 F.2d 1277; 193 USPQ 145 (CCPA 1977). Thus, the second error relied upon in the Reissue Declaration is not correctable error under 35 U.S.C. § 251. However, it is further noted that claims have not been presented which are commensurate in scope with the cancelled claims discussed by Applicants as a second error. Since Applicants do not have to rely upon this error, the question of improper rejoinder in this reissue application is moot.

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Applicants remarks have been fully considered, but are not persuasive, and claims 133, 154, 157, 88, 92, 93, 113, 115, 122, 123, 126, 128, 131, 132, 134 – 153, 155, 156, 158, and 159 stand as rejected under 35 U.S.C. § 251 for being an improper recapture of broadened claimed subject matter surrendered in the application for the patent upon which the present reissue is based. Applicants cite *In re Doyle*, 63 USPQ2d 1161, (CAFC 2002) in support of their rebuttal, and argue that the recapture doctrine is inapplicable “because the pertinent claims were not cancelled to overcome prior art.” Applicant relies upon the Board of Patent Appeals and Interferences as having agreed with that Appellant that the recapture doctrine doesn’t apply to claims that were not cancelled to avoid the prior art. The examiner understands that Board’s position to be that divisional subject matter cancelled without estoppel is not “surrendered” subject matter. The Court’s decision in *Doyle* relates to reissue claims that were generic both to the patented claims and to claims of a non-elected invention and addresses the propriety of reissue claims that were properly examinable with the elected invention. The fact pattern is quite different from the present case in that the rejection here is based upon specific subject matter having been expressly surrendered to distinguish over the prior art. *Doyle* lends no clarity to the issue, and the examiner regards *Pannu* [*supra.*] as being more to the point.

The previous rejection of claims 128, 131 – 134, 136, 137, 139, 140, 142, 144, 145, 148, 154, 156, 157, and 159 under 35 U.S.C. § 102(b) as being anticipated by Ono, et al is *withdrawn*, and Applicants’ remarks have been considered to the following

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effect. As a preliminary matter, the examiner wishes to clarify that the reference to claim 14 in the body of the rejection (line 11) was a typographical error, and the remark was directed instead to claim 141.

The examiner concurs with Applicants' analysis of the various teachings of the reference. The original rejection relied primarily on Figure 4 because the hologram had not only a plurality of different focal distances, but at least two different numerical apertures associated with the regions generating the different focal points. Notably the two focal points relied upon were on opposite sides of the lens. The examiner was not ignoring the recitation of the focal points as being on an information plane. Rather, the argument was intended to be one of inherency.

The claims are directed to a subcombination not including the information layer, and in this respect the relevant passages were regarded as an intended use recitation. The compound lens inherently has two numerical apertures and two focal points. Thus the lens inherently functions to produce a focal point through a layer *when* an information plane is placed as recited.

Applicants' argument with regard to the functional recitation being given weight under 35 U.S.C. §112, sixth paragraph is *not persuasive*, since the claims omit the critical "means for" recitation, and since Applicants have not forwarded a compelling argument that, despite this absence, the claim limitation is written as a function to be performed and does not recited sufficient structure which would preclude application of § 112, sixth paragraph. Still, the functional language must be given weight for all it conveys (to one of ordinary skill) about the *structure* of the invention.

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When read in light of the specification, the character of a region as "being optimized so that the lens has a numerical aperture . . . to produce a focal point through a . . . layer *on an information plane* placed at a distance . . . from the surface of the . . . layer" [emphasis added] conveys that the structure of the region cooperates with the remaining structure of the lens to produce [any of several] specific results with respect to aberration and spot intensities. [Here the examiner is not importing limitations into the claims, but simply construing the meaning of "optimized" in light of the specification.] As is readily understood by those skilled in the art, the result relates to the *structure* of the region. It is not sufficient for the prior art to have a structure that produces different focal point associated with different numerical apertures (as does that of Ono, et al). Rather, the structure must be optimized in at least some broad aspect with respect to the thickness of a layer through which light is focused on an information plane and with respect to the numerical aperture at which that is performed. Ono, et al are silent as to any such relationship, and thus cannot be said to anticipate "optimization" in these respects. While at first blush, it might have been obvious to "optimize" (within some ordinary meaning) each of the regions associated with each of the numerical apertures and focal points of Ono, et al, there is *no suggestion* to optimize the regions so that both regions focus through a layer on an information plane, as required by each of the claims. Accordingly, neither a rejection based upon anticipation nor upon obviousness is appropriate.

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Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Juba whose telephone number is (571) 272-2314. The examiner can normally be reached on Mon.-Fri. 9 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Drew Dunn can be reached on Mon.- Thu., 9 - 5.

The centralized fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306 for *all* communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.


JOHN JUBA
PRIMARY EXAMINER
Art Unit 2872

January 28, 2004